What Is Claimed Is:

Sub A1)

1. A safety device for a stored-program control, comprising:

a controller for exchanging data with the stored-program control and for exchanging data, via a bus system, with a peripheral to be controlled; and

a memory for storing safety-relevant data of the stored-program control, the safety-relevant data being accessible by the controller.

2. The device according to claim 1, further comprising a monitor for monitoring a wake-up signal generated by the stored-program control and transmitted to the stored-program control by the controller.

Sub B1)

3. The device according to claim 1, further comprising a contactor for providing an output signal displaying an operability of the stored-program control.

4. The device according to claim 2, wherein the monitor activates a data exchange with a bus controller that controls the bus system as a function of the wake-up signal.

5. The device according to claim 1, further comprising an interface for receiving at least one control signal forwarded to the stored-program control via the controller.

6. The device according to claim 1, further comprising a real-time controller for sending a control signal to a computer bus system, the computer bus system allowing a data exchange to take place between the controller and the stored-program control.

7. The device according to claim 1, further comprising a circuit board for accommodating at least one of the controller and the memory.

Sub A2)

8. A safety device for a stored-program control, comprising:

a controller for exchanging data with the stored-program control and for exchanging data, via a bus system, with a peripheral to be controlled; and

a monitor for monitoring a wake-up signal generated by the stored-

program control and transmitted to the stored-program control by the controller.

9. The device according to claim 8, further comprising a contactor for producing an output signal indicating an operability of the stored-program control.

10. The device according to claim 8, wherein the monitor activates, as a function of the wake-up signal, a bus controller, which controls a data transport via the bus system.

11. The device according to claim 8, further comprising an interface for receiving at least one control signal forwarded to the stored-program control via the controller.

12. The device according to claim 8, further comprising a circuit board for accommodating at least one of the controller and the monitor.

13. A safety device for a stored-program control, comprising:

a controller for exchanging data with the stored-program control and for exchanging data, via a bus system, with a peripheral to be controlled; and

an interface for receiving at least one control signal forwarded to the stored-program control via the controller.

14. The device according to claim 13, further comprising a circuit board for accommodating at least one of the controller and the interface.